



August 25, 2015

Reference No. 631012

Rosaleen Nogle, PE, Associate Engineer
Buffalo Sewer Authority
1038 City Hall
65 Niagara Square
Buffalo, New York 14202

Dear Ms. Nogle:

**Re: Hamburg Drain Optimization Project
Mill Race and Chicago Street Control Structures**

As requested at our update meeting on August 12, 2015, the following outlines the concept, status, and schedule for the referenced project which is currently under design by GHD. As you know, this project is part of the Hamburg Drain Optimizations Item, which according to the approved implementation schedule for the Buffalo Sewer Authority's (BSA) approved Long Term Control Plan (LTCP) and associated Amended Administrative Order, is to be completed as follows:

- Engineering Start: March 18, 2015
- Engineering Completion: March 18, 2017
- Notice to Proceed: March 18, 2016
- Substantial Completion: March 18, 2018

Note that the schedule shown allows for staged design and construction since the project is likely to be designed and constructed in phases. The information below takes this into consideration.

1. Project Summary

Currently the project involves the construction of two separate control chambers in the Mill Race and Chicago Street Sewers to take advantage of available storage in these overflow sewers to control overflows from SPPs 67 and 281, respectively. In addition, the projects include the construction of interconnections or drains between the control structures and the South Interceptor. Finally, the project preliminarily includes partial sewer separations in the same general area to reduce overflows from five smaller SPPs south of I-190 (SPPs 129, 130, 133, 135, and 145). As outlined in the LTCP, during the preliminary design phase, the BSA will evaluate the use of additional Green Infrastructure as a means of reducing or

eliminating the need for the sewer separation portion of the project. In concept, this project is similar to the Smith Street RTC project that is currently under design and construction.

2. Project Status

To date, GHD has begun the preliminary design phase of the project including review of available as-built information, confirmation of weir heights, preliminary site selection, hydraulic modeling and conceptual layout development of the proposed improvements. The next step in the process is to determine the condition of both the Mill Race and Chicago Street Sewers and identify any known and unknown connections, so that all tributary flows can be accounted for and included in the final design. In order to make these determinations, the inside of the sewers must be thoroughly inspected. GHD is currently completing negotiations with a subconsultant (OpTech) to complete the inspection. As you know, on July 17, 2015, representatives for both GHD and the BSA met with OpTech and conducted a site visit to discuss the scope and limits of the inspection and identify access points. During that visit, the team realized that the majority of both sewers were nearly full of water. Upon further investigation it was determined that due to the unusually wet summer, water levels in Lake Erie and the Buffalo River were much higher than originally anticipated. Normally the majority of the length of the sewers to be inspected is either dry or nearly so. These elevated water levels continue.

3. Project Schedule

This being the case and based on a review of historical lake levels it now appears that the inspection will not take place until late fall or early winter which will make the issuance of the notice to proceed on March 18, 2016 unfeasible. Our belief is that had the inspection been completed in July or August as originally intended and barring any other unforeseen delays, the design schedule would have been met. Obviously, unusually and prolonged high lake levels are neither in the control of the BSA or GHD.

Recognizing the amount of design yet to be completed that is dependent upon the results of the inspection, GHD recommends that the Schedule be revised to account for this delay. Based upon our understanding that the project design will include both chambers while construction may be phased over separate projects, we believe that the following revised schedule of remaining milestones is reasonable.

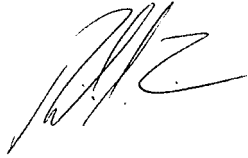
- Engineering Completion: March 18, 2017 (unchanged)
- Notice to Proceed: June 18, 2017
- Substantial Completion: March 18, 2019

GHD and OpTech will be prepared to mobilize immediately when lake levels permit the inspection and will be monitoring lake levels via the NOAA website. However, we would appreciate it if the BSA would also periodically check the actual water levels in both sewers, so that we can respond and complete the inspection quickly.

Thank you for the opportunity to continue with this important project and please do not hesitate to contact us should you need any further information or clarification.

Sincerely,

GHD

A handwritten signature in black ink, appearing to read 'MJQ', with a stylized flourish at the end.

Michael J. Quinn, P.E., B.C.E.E
Associate

MJQ/ck/1

cc: B. Smith, C. Cowan
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